

Claims

What is claimed is:

1 1. A computer program for implementing a learning system with a learner-
2 constructed response based methodology, comprising:
3 a presentation process for presenting at least one knowledge topic to the learner
4 and for prompting the learner to enter a learner constructed response thereto;
5 an evaluation information process for providing keyword data that corresponds to
6 the knowledge topic; and
7 an evaluation process for determining, based upon entry of a learner-constructed
8 response to the knowledge topic, success or failure of the learner to know the knowledge
9 topic, the success or failure being determined by comparison of the learner-constructed
10 response with the keyword data.

1 2. The program of claim 1 wherein the comparison comprises a
2 determination of whether or not expected keyword data appears in the learner-constructed
3 response.

1 3. The program of claim 1 wherein the keyword data comprises primary
2 keywords or phrases, related key words or phrases, and synonyms.

1 *Sub A1* 4. The program of claim 1 wherein upon a determination of failure of the
2 learner, remedial information is provided to the learner before the learner is prompted to
3 enter another learner-constructed response.

1 5. The program of claim 1 wherein upon a determination of success of the
2 learner, the learner is not further prompted to enter a learner-constructed response for the
3 topic.

1 6. The program of claim 1 wherein the comparison comprises a
2 determination of whether or not expected keyword data appears in the learner-constructed
3 response, the keyword data comprising at least one exact keyword.

1 7. The program of claim 1 wherein the comparison comprises a
2 determination of whether or not expected keyword data appears in the learner-constructed
3 response, the keyword data comprising at least one exact phrase.

1 *Sub 2* 8. The program of claim 1 wherein the comparison comprises a
2 determination of whether or not expected keyword data appears in the learner-constructed
3 response, the keyword data comprising at least one synonym.

1 9. The program of claim 1 wherein the comparison comprises a
2 determination of whether or not the learner-constructed response fails a lexical analysis.

1 10. The program of claim 1 wherein the comparison comprises a
2 determination of whether or not expected keyword data appears in the learner-constructed
3 response, the keyword data comprising at least one related word.

1 11. The program of claim 1 further comprising a reporting process for
2 analyzing information regarding a performance of at least one learner during the
3 presentation process, the evaluation information process and the evaluation process, and
4 reporting an analyzed result to at least one predetermined party.

1 12. A method for implementing an automated learning system comprising:
2 presenting at least one knowledge topic to the learner and for prompting the
3 learner to enter a learner constructed response thereto;
4 comparing keyword data that corresponds to the knowledge topic with the learner-

5 constructed response; and
6 determining success or failure of the learner to know the knowledge topic, the
7 success or failure being determined by whether or not expected keyword data appears in
8 the learner-constructed response.

1 13. The method of claim 12 wherein the keyword data comprises primary
2 keywords or phrases, related key words or phrases, and synonyms.

1 *Sub a 3* 14. The method of claim 12 wherein upon a determination of failure of the
2 learner, remedial information is provided to the learner before the learner is prompted to
3 enter another learner-constructed response.

1 15. The method of claim 12 wherein upon a determination of success of the
2 learner, the learner is not further prompted to enter a learner-constructed response for the
3 topic.

1 16. The program of claim 12 wherein the comparison comprises a
2 determination of whether or not expected keyword data appears in the learner-constructed
3 response, the keyword data comprising at least one exact keyword.

1 17. The program of claim 12 further comprising collecting information
2 regarding a performance of at least one learner during the presentation process, the
3 evaluation information process and the evaluation process, analyzing the collected
4 information, and reporting an analyzed result to at least one predetermined party.

1 *4* 18. A method for implementing an automated learning system comprising:
2 presenting a series of knowledge topics to the learner and prompting the learner to
3 enter a learner constructed response to each topic;

4 comparing keyword data that corresponds to the knowledge topics with the
5 learner-constructed responses; and

6 determining success or failure of the learner to know each of the knowledge topic,
7 the success or failure being determined by whether or not expected keyword data appears
8 in the learner-constructed response;

9 upon a determination of failure of the learner, providing remedial information to
10 the learner and again prompting the learner to enter a learner-constructed response

11 upon a determination of success of the learner, discontinuing presentation and
12 prompting of the learner regarding the particular knowledge topic;

13 whereupon automated presentation of the series is completed when success is
14 determined for each knowledge topic.

1 *Sub a4* 19. The program of claim 18 wherein the comparison comprises a
2 determination of whether or not expected keyword data appears in the learner-constructed
3 response, the keyword data comprising at least one exact keyword.

1 20. The program of claim 18 wherein the comparison comprises a
2 determination of whether or not expected keyword data appears in the learner-constructed
3 response, the keyword data comprising at least one exact phrase.

1 21. The program of claim 18 wherein the comparison comprises a
2 determination of whether or not expected keyword data appears in the learner-constructed
3 response, the keyword data comprising at least one synonym.

1 22. The program of claim 18 wherein the comparison comprises a
2 determination of whether or not the learner-constructed response fails a lexical analysis.

1 *9* *4*
~~23.~~ The method of claim ~~18~~ further comprising:

[illegible]